

Amendments to the Specification

Please amend the paragraph beginning on line 5 of page 10 as follows:

Meanwhile, when a guard component L_{GUARD} having a size of $\frac{N}{2} \times L_{GUARD}$ is inserted after or before C^N and S^N for generating the IFW, an orthogonal spreading code can be expressed as in Equation 2, wherein the length of a code is $N+2 \times L_{GUARD}$, $[[m]]$ N is a natural number at least 2, and the length of guard component is an integer at least 0.

$$\begin{aligned} LS^{N+2 \times L_{GUARD}} &= \begin{bmatrix} 0^{L_{GUARD}} & C^N & 0^{L_{GUARD}} & S^N \\ 0^{L_{GUARD}} & C^N & 0^{L_{GUARD}} & -S^N \end{bmatrix} \\ &= \begin{bmatrix} LS_0^{N+2 \times L_{GUARD}} \\ \vdots \\ LS_K^{N+2 \times L_{GUARD}} \\ \vdots \\ LS_{N-1}^{N+2 \times L_{GUARD}} \end{bmatrix} \quad \dots \text{Equation 2.} \end{aligned}$$